

WHAT IS CLAIMED IS:

1. A picture signal reproducing apparatus for synchronously reproducing a variety of digital coded data strings, comprising:

5 data transmission controlling means for inputting a series of digital multiplexed coded data strings including a plurality of reproduction units connected with each other in serial, each of said reproduction units having a system clock reference, and inserting a reproduction unit switching information at a connection point between two reproduction units in said series of digital multiplexed coded data strings according to said system clock reference for each of said reproduction units; and

reproducing means for detecting said connection point on the basis of said reproduction unit switching information from said series of digital multiplexed coded data strings to synchronously reproduce said variety of digital coded data strings at the detected connection point.

2. The picture signal reproducing apparatus as set forth in claim 1, wherein said data transmission controlling means has:

a connection point detecting unit for detecting said connection point between said reproduction units;

a switching information producing unit for producing said reproduction unit switching information; and

a switching information inserting unit for inserting said reproduction unit switching information at said connection point between said reproduction units in said series of digital multiplexed coded data strings.

3. The picture signal reproducing apparatus as set forth in claim 1, wherein each of said reproduction units has a header including said reproduction unit switching information, and said reproducing means having:

30 a header analyzing unit for analyzing to detect said connection point between said reproduction units on the basis of said reproduction unit switching information; and

a decoding unit for decoding said series of digital multiplexed coded data strings to synchronously reproduce said variety of said digital coded data strings according to the detected reproduction unit switching information.

5 4. The picture signal reproducing apparatus as set forth in claim 1, wherein said reproduction unit switching information produced by said switching information producing unit of said data transmission controlling means includes a first system clock reference of said reproduction unit just before said connection point and a
10 second system clock reference of said reproduction unit just after said connection point.

5. The picture signal reproducing apparatus as set forth in claim 1, wherein said reproduction unit switching information produced by said switching information producing unit of said data transmission controlling means includes an identifying
15 code, and said header analyzing unit of said reproducing means being operated to analyze said identifying code to detect said switching information.

6. A picture signal reproducing method of synchronously reproducing a variety of digital coded data strings, comprising the steps of:

- 20 (a) inputting a series of digital multiplexed coded data strings including a plurality of reproduction units connected with each other in serial, each of said reproduction units having a system clock reference;
- 25 (e) inserting a reproduction unit switching information at a connection point between two reproduction units in said series of digital multiplexed coded data strings according to said system clock reference for each of said reproduction units;
- (f) detecting said connection point on the basis of said reproduction unit switching information from said series of digital multiplexed coded data strings; and
- 30 (g) synchronously reproducing said variety of digital coded data strings at the detected connection point.

7. The picture signal reproducing method as set forth in claim 6, wherein said reproduction unit switching information includes a first system clock reference of said reproduction unit just before said connection point and a second system clock reference of said reproduction unit just after said connection point.

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8. The picture signal reproducing method as set forth in claim 6, wherein said reproduction unit switching information produced in said step (b) includes an identifying code, and said step (c) having the step of analyzing said identifying code to detect said switching information.

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11. The picture signal reproducing method as set forth in claim 6, wherein said reproduction unit switching information includes a first system clock reference of said reproduction unit just before said connection point and a second system clock reference of said reproduction unit just after said connection point.